User Manual

4-Port DualView Mini DisplayPort KVMP Switch with Peripheral Sharing

GCS1924
PART NO. M1203

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Package Content

- 1 x 4-port DualView Mini DisplayPort KVMP Switch
- 8 x Mini DisplayPort 1.1a Cable
- 4 x USB 2.0 Cable (Type A to Type B)
- 4 x 3.5mm Audio Cable (Green Head)
- 4 x 3.5mm Mic Cable (Pink Head)
- 1 x User Manuel
- 1 x Power Adapter
- 1 x Warranty Card

System Requirements

Console
- Two mini DisplayPort Monitors
- 1 x USB Keyboard
- 1 x USB Mouse
- Speaker / Microphone (Analog / Digital) – Optional *

* Front Audio Port supports Analog Audio output only

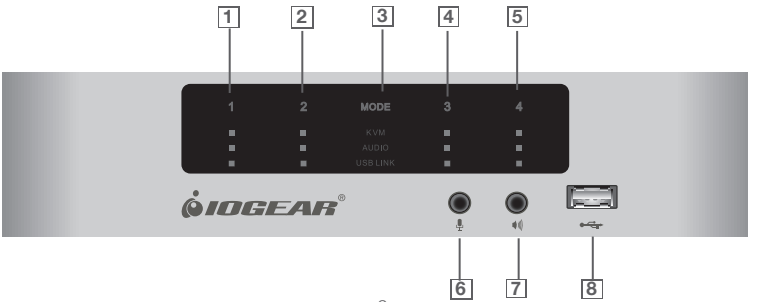
Computer
- mini DisplayPort (Single / Dual mini DisplayPort Video card)
- Type “A” USB Port

Operating System
- Window XP / VISTA / 7
- MAC OSX 10.5.4 or greater

GCS1924 Overview

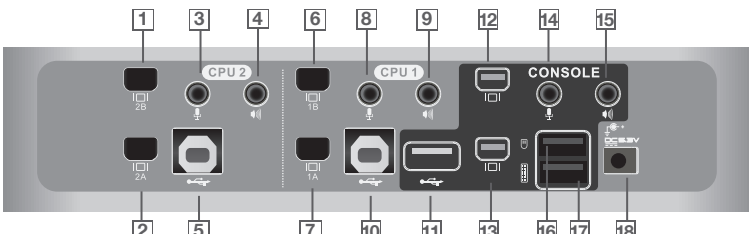
Front View

1. Port 1 Touch Panel
2. Port 2 Touch Panel
3. Mode Touch Panel
4. Port 3 Touch Panel
5. Port 4 Touch Panel
6. Front Panel Console Mic. Connection (analog only)
7. Front Panel Console Audio Connection (analog only)
8. Front Panel USB 2.0 Peripheral Sharing Port (w/ Quick Charge)



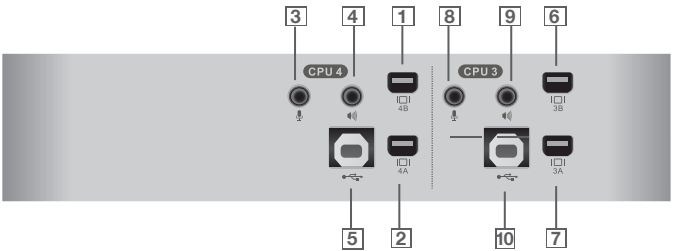
Rear View

1. CPU 2 Mini DisplayPort 2B
2. CPU 2 Mini DisplayPort 2A
3. CPU 2 Mini-TOSLINK Mic. (Digital/Analog)
4. CPU 2 Mini-TOSLINK Audio (Digital/Analog)
5. CPU 2 USB Connection
6. CPU 1 Mini DisplayPort 1B
7. CPU 1 Mini DisplayPort 1A
8. CPU 1 Mini-TOSLINK Mic. (Digital/Analog)
9. CPU 1 Mini-TOSLINK Audio (Digital/Analog)
10. CPU 1 USB 2.0 Connection
11. Console USB 2.0 Peripheral Sharing Port
12. Console Mini DisplayPort B
13. Console Mini DisplayPort A
14. Console Mini-TOSLINK Mic. (Digital/Analog)
15. Console Mini-TOSLINK Audio (Digital/Analog)
16. Console USB Mouse Port
17. Console USB Keyboard Port
18. DC Power Jack



Side View

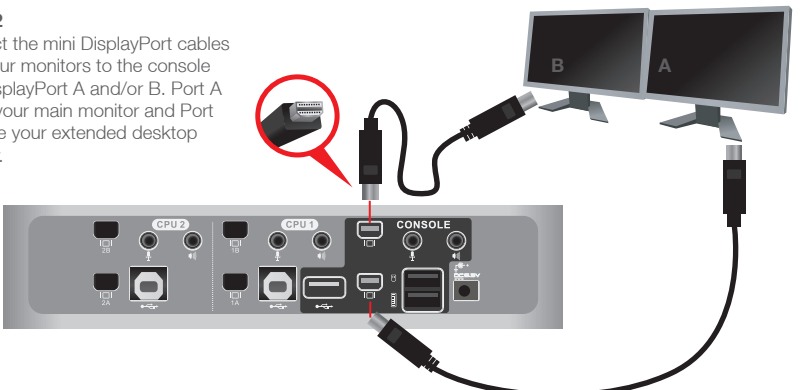
1. CPU 4 Mini DisplayPort 4B
2. CPU 4 Mini DisplayPort 4A
3. CPU 4 Mini-TOSLINK Mic. Connection (Digital/Analog)
4. CPU 4 Mini-TOSLINK Audio Connection (Digital/Analog)
5. CPU 4 USB Connection
6. CPU 3 Mini DisplayPort 3B
7. CPU 3 Mini DisplayPort 3A
8. CPU 3 Mini-TOSLINK Mic. Connection (Digital/Analog)
9. CPU 3 Mini-TOSLINK Audio Connection (Digital/Analog)
10. CPU 3 USB 2.0 Connection



Installation

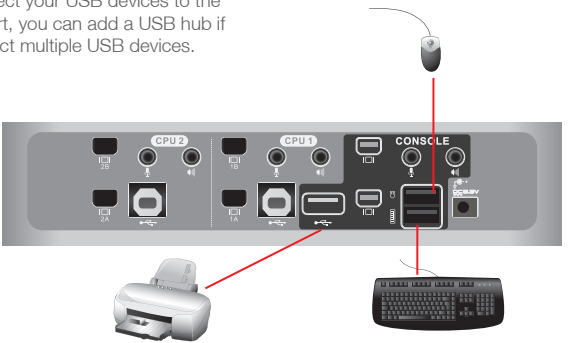
STEP 1
Please make sure your source devices and displays are powered off before you start.

STEP 2
Connect the mini DisplayPort cables from your monitors to the console mini DisplayPort A and/or B. Port A will be your main monitor and Port B will be your extended desktop monitor.



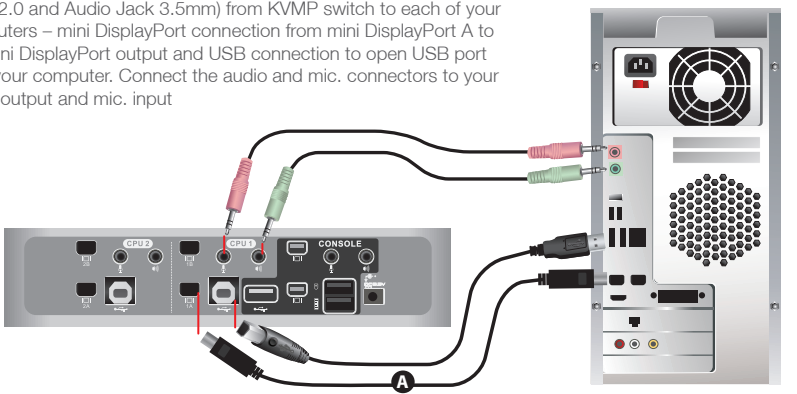
STEP 3

Connect your USB keyboard and mouse to the console USB keyboard port and console USB mouse port. Connect your USB devices to the USB peripheral port, you can add a USB hub if you need to connect multiple USB devices.



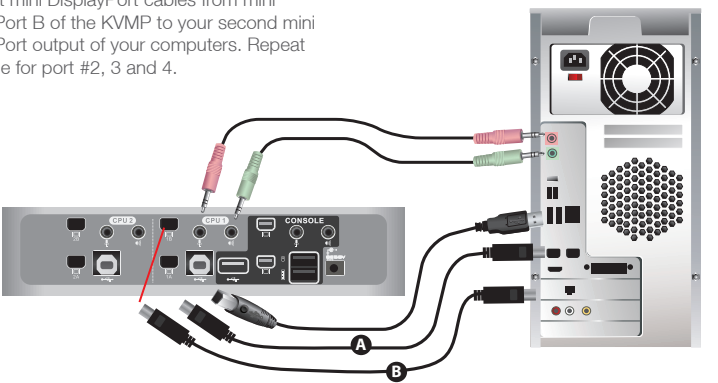
STEP 4

Connect your mini DisplayPort and a set of IOGEAR custom cable (USB 2.0 and Audio Jack 3.5mm) from KVMP switch to each of your computers – mini DisplayPort connection from mini DisplayPort A to the mini DisplayPort output and USB connection to open USB port from your computer. Connect the audio and mic. connectors to your audio output and mic. input



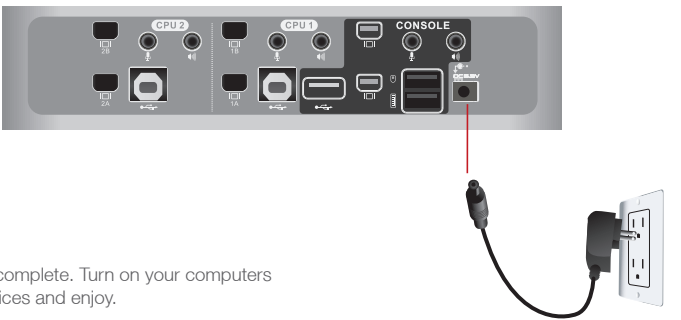
STEP 5

Connect mini DisplayPort cables from mini DisplayPort B of the KVMP to your second mini DisplayPort output of your computers. Repeat the same for port #2, 3 and 4.



STEP 6

Plug the power adapter into the power outlet and connect it to the DC power jack from the KVMP



Final Step

Installation is complete. Turn on your computers and other devices and enjoy.

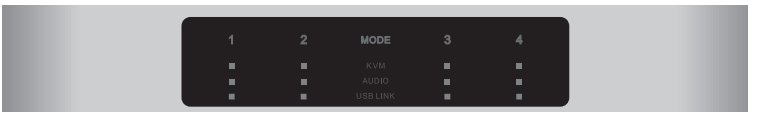
LED Indication

LED		Description
Online / Selected	Dim Orange	A device is connected to the KVMP switch but the port is not on focus
	Bright Orange	The specific port has focus on the KVM (Keyboard, video and mouse)
Audio	Green	The specific port has focus on the audio
USB Link	Green	The specific port has focus on the USB peripheral sharing ports

Port Switching

Simply touch the front panel from the multimedia KVMP switch or trigger hotkeys from your keyboard.

Port Switching via Front Panel Touch



Function	Touch Panel Control
Switch all focus (KVM, audio and USB) to a specific port	1. Touch MODE once, KVM, AUDIO, and USB LINK LEDs will flash 2. Then touch the specific port to switch all focus to that port
Switch KVM focus to a specific port	1. Touch MODE twice, KVM LED will flash 2. Then touch the specific port to switch KVM port to that port

Switch audio focus to a specific port	1. Touch **MODE** three times, **AUDIO** LEDs will flash 2. Then, touch the specific port to switch Audio port to that port
Switch USB focus to a specific port	1. Touch **MODE** four times, **USB LINK** LED will flash 2. Then, touch the specific port to switch USB focus to that port

Port Switching via Hotkeys

Port Switching via Hotkeys

Hotkeys	Description
[Scroll Lock] [Scroll Lock] [Enter]	Switch all focus (KVM, audio and USB) to the next port
[Scroll Lock] [Scroll Lock] [n] [Enter]	Switch all focus (KVM, audio and USB) to port n*
[Scroll Lock] [Scroll Lock] [k] [Enter]	Switch KVM focus to the next port
[Scroll Lock] [Scroll Lock] [n] [k] [Enter]	Switch KVM focus to port n*
[Scroll Lock] [Scroll Lock] [s] [Enter]	Switch audio focus to the next port
[Scroll Lock] [Scroll Lock] [n] [s] [Enter]	Switch audio focus to port n*
[Scroll Lock] [Scroll Lock] [u] [Enter]	Switch USB focus to the next port
[Scroll Lock] [Scroll Lock] [n] [u] [Enter]	Switch USB focus to port n*

Continue next page

Port Switching via Hotkeys

[Scroll Lock] [Scroll Lock] [n] [k] [u] [Enter]	Switch KVM and USB focus to port n*
[Scroll Lock] [Scroll Lock] [n] [k] [s] [Enter]	Switch KVM and audio focus to port n*
[Scroll Lock] [Scroll Lock] [n] [u] [s] [Enter]	Switch USB and audio focus to port n*

*Note: n is an interval that stands for the Port number
k stands for KVM focus
s stands for audio focus
u stands for USB focus

Auto Scanning

You can either activate Autoscan Mode via front panel push button or hotkeys.

Function		Description	
Auto Scan	Front panel pushbutton	Press and hold port 1 and port 2 Pushbutton simultaneously for 2 seconds to activate Autoscan Mode*	
	Hotkeys	[Scroll Lock] [Scroll Lock] [a] [Enter]	Activate Autoscan mode. It will cycle from port to port every 5 seconds (default)
		[Scroll Lock] [Scroll Lock] [a] [n] [Enter]	Activate Autoscan mode. It will cycle from port to port every n seconds**

*Note: Autoscan Mode from front panel push button will be scanning a port every 5 seconds by default. If you wish to have the Autoscan Mode be scanning with different time interval, please refer to trigger Autoscan Mode from hotkeys.
**Note: n is an interval between 1 and 99 that stands for the time (in second) desired for scanning each port.

Hotkey Setting Mode (HSM)

Hotkey	Description
1. Press and hold [Num Lock] (Use the [Clear] key on a Mac keyboard.) 2. Press and release [-] 3. Release [Num Lock] (Use the [Clear] key on a Mac keyboard.)	Invoking hotkey setting mode
Invoke HSM, then press [h]	Change the HSM invocation keys from [Num Lock] to [Ctrl] and from [-] to [F12]
Invoke HSM, then press [t]	Switch port switching hotkey sequence between [Scroll Lock] [Scroll Lock] and [Ctrl] [Ctrl]
Invoke HSM, then press [F2]	Enables Mac keyboard emulation
Invoke HSM, then press [F3]	Enables Sun keyboard emulation
Invoke HSM, then press [F10]	Auto-detect the keyboard operating platform (for PC compatible systems). Activates Pass Through Keyboard Mode (keystrokes are sent directly to the computer instead of through the Mac emulator).

Hotkey	Description
Invoke HSM, then press [l]	Quick charge mode
Invoke HSM, then press [e]	power on detection
Invoke HSM, then press [n] + [enter]	enables game mode
Invoke HSM, then press [w]	mouse port switch
Invoke HSM, then press [F4]	List hotkey settings – simply invoke the hotkey and then open a text editor, such as notepad, and use the Paste function to display the hotkey settings.
Invoke HSM, then press [F5]	USB Reset
Invoke HSM, then press [b]	Toggle hotkey beepers on or off
Invoke HSM, then press [x] [Enter]	Disable or enable port switching hotkey
Invoke HSM, then press [u] [p] [g] [r] [a] [d] [e] [Enter]	Activate Firmware Upgrade Mode – Front panel KVM LED will flash indicating Firmware Upgrade Mode is activated.

Hotkey	Description
Invoke HSM, then press [r] [Enter]	Restore default settings
Invoke HSM, then press [d]	Capture and store video information on specific port
Invoke HSM, then press [m]	Enable or disable mouse emulation
Invoke HSM, then press [F1]	Reset keyboard and mouse under some special OS' that do not support USB 2.0

*Note: To exit HSM manually, press Esc or spacebar

Digital & Analog Audio Setup Table

GCS1924 offers both digital and analog Audio; the rule of the audio distribution is "**digital in digital out**" and "**analog in analog out**". The table below explains this in detail.

	KVM Console Audio Out	"Digital Audio Out (Refer to #15 on Page 7)"	"Analog Audio Out (Refer to #15 on Page 7 and #7 on Page 6)"
KVM CPU Audio			
CPU 1	Digital In	Digital Out	No Audio
	Analog In	No Audio	Analog Out
CPU 2	Digital In	Digital Out	No Audio
	Analog In	No Audio	Analog Out
CPU 3	Digital In	Digital Out	No Audio
	Analog In	No Audio	Analog Out
CPU 4	Digital In	Digital Out	No Audio
	Analog In	No Audio	Analog Out

***For Front Panel Audio/Mic, it only outputs Analog signal through sound stereo devices.**
****When both Console Audio and Front Panel Audio are connected, "Only" Front Panel Audio will output Audio signal.**

Mac Keyboard Emulation

The PC compatible (101/104 key) keyboard can emulate the functions of the Mac keyboard. The emulation mappings are listed in the table below.

PC Keyboard	Mac Keyboard
[Shift]	Shift
[Crtl]	Ctrl
[Ctrl] [1]	
[Ctrl] [2]	
[Ctrl] [3]	
[Ctrl] [4]	
[Alt]	Alt

PC Keyboard	Mac Keyboard
[Print Screen]	F13
[Scroll Lock]	F14
	=
[Enter]	Return
[Backspace]	Delete
[Insert]	Help
[Ctrl]	F15

*Note: When using key combinations, press and release the first key (Ctrl), then press and release the second key.

Factory Default Hotkeys Settings

Function	Default
Port Switching	[Scroll Lock] [Scroll Lock]
Invoking HSM	[Num Lock] [-]
Auto Scan Interval	5 Seconds
Beeper	On
Keyboard Operating Platform	PC Compatible
Port Switching Keys	Enabled
Mouse Emulation	On

Firmware Upgrade

Note: In order to perform a firmware upgrade, you need to use a computer that's not connected to the KVM.

Step 1
Connect the provided firmware upgrade cable to the firmware upgrade port of the KVM and the serial port of your computer. Connect power adapter to your power outlet and the KVM.

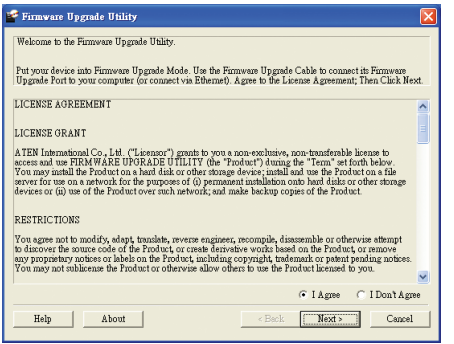
Step 2
Go to www.iogear.com to download the latest available firmware or the specific firmware that you wish to upgrade to.

Step 3
Shut down all the computers that are connected to the KVM. Then Invoke Firmware Upgrade Mode. (Please refer to Hotkeys Setting Mode section.)

Step 4
Extract the file with WinRAR or compatible software. Then double click on the execute file to begin with the Firmware Upgrade Utility.

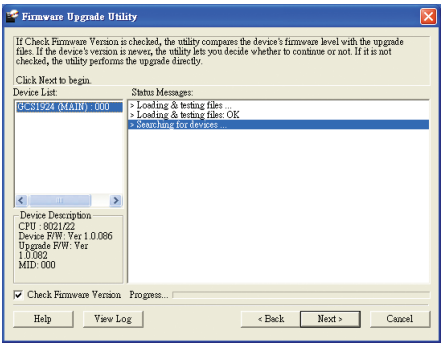
Step 5

Read the License Agreement and click "I Agree" then click "Next" if you wish to continue with the firmware upgrade. Otherwise, click "Cancel" to exit.

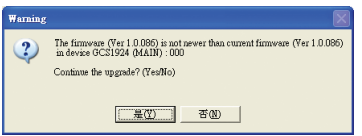

Firmware Upgrade Utility
Welcome to the Firmware Upgrade Utility.
Put your device into Firmware Upgrade Mode. Use the Firmware Upgrade Cable to connect its Firmware Upgrade Port to your computer (or connect via Ethernet). Agree to the License Agreement; Then Click Next.
LICENSE AGREEMENT
LICENSE GRANT
ATEN International Co., Ltd. ("Licensor") grants to you a non-exclusive, non-transferable license to access and use FIRMWARE UPGRADE UTILITY (the "Product") during the "Term" set forth below. You may install the Product on a hard disk or other storage device; install and use the Product on a file server for use on a network for the purposes of (i) permanent installation onto hard disks or other storage devices or (ii) use of the Product over such network; and make backup copies of the Product.
RESTRICTIONS
You agree not to modify, adapt, translate, reverse engineer, recompile, disassemble or otherwise attempt to discover the source code of the Product, or create derivative works based on the Product, or remove any proprietary notices or labels on the Product, including copyright, trademark or patent pending notices. You may not sublicense the Product or otherwise allow others to use the Product licensed to you.
I Agree
I Don't Agree
Help
About
< Back
Next >
Cancel

Step 6

Choose the correct KVM that you wish to perform firmware upgrade from the “Device List” and then click “Next” to continue. Then the Firmware Upgrade Utility will verify if there is a KVM connected to the computer by the firmware upgrade cable. (Check Firmware Version checkbox is optional)


Firmware Upgrade Utility
If Check Firmware Version is checked, the utility compares the device's firmware level with the upgrade files. If the device's version is newer, the utility lets you decide whether to continue or not. If it is not checked, the utility performs the upgrade directly.
Click Next to begin.
Device List:
Status Messages:
GCS1924 (MAIN) : 000
> Loading & testing files ...
> Loading & testing files: OK
> Searching for devices ...
Device Description
CPU : 8021/22
Device F/W: Ver 1.0.086
Upgrade F/W: Ver 1.0.082
MID: 000
Check Firmware Version
Progress...
Help
View Log
< Back
Next >
Cancel

Step 7
If you have checked the “Check Firmware Version” checkbox, then the utility will check the current firmware that is on your KVM. If the current firmware is newer than the firmware that you wish to upgrade to, a window will popup and prompt you to ask if you wish to proceed. Simply click “Yes” to start the upgrade and “No” to cancel the upgrade.


Warning
The firmware (Ver 1.0.086) is not newer than current firmware (Ver 1.0.086) in device GCS1924 (MAIN) : 000
Continue the upgrade? (Yes/No)
是(Y)
否(N)

Note: If you did not check the “Check Firmware Version” checkbox, utility will perform the upgrade automatically no matter what version of firmware you have in the KVM.

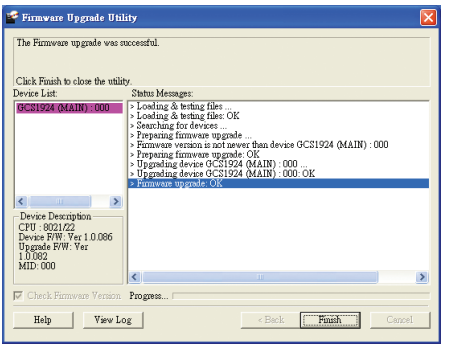
Step 8

When the firmware upgrade is done, you will see “Firmware upgrade OK” in the “Status Messages” window. Then simply click “Finish” to complete the whole firmware upgrade process.

Final Step

Now the KVM will reset by itself and it will be ready for usage after the rest.

Note: If you see warring message of Mac O.S. version incompatible, please contact IOGEAR service staff for latest firmware upgrade tool


Firmware Upgrade Utility
The Firmware upgrade was successful.
Click Finish to close the utility.
Device List:
GCS1924 (MAIN) : 000
Status Messages:
> Loading & testing files ...
> Loading & testing files: OK
> Searching for devices ...
> Preparing firmware upgrade ...
> Firmware version is not newer than device GCS1924 (MAIN) : 000
> Preparing firmware upgrade: OK
> Upgrading device GCS1924 (MAIN) : 000 ...
> Upgrading device GCS1924 (MAIN) : 000: OK
> Firmware upgrade: OK
Device Description
CPU : 8021/22
Device F/W : Ver 1.0.086
Upgrade F/W : Ver 1.0.082
MID: 000
Check Firmware Version
Progress...
Help
View Log
< Back
Finish
Cancel

Upgrade Fail

If you don't see "Firmware upgrade OK" in the "Status Messages" window, it means the utility has failed to complete the firmware successfully. If that occurs, please do the following:

Step 1
Unplug all USB cables and DC power adapter from GCS1924.

Step 2
Plug single USB cable in the last CPU port with PC powered on.

Step 3
Plug DC power adapter, the GCS1924's port LED will start flash after powered on.

Step 4
Run FW upgrade program again

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential setting. This product generates, uses, and can radiate radio frequency energy and, if not installed and used as directed, it may cause harmful interference to radio communications. Although this product complies with the limits for a Class B digital device, there is no guarantee that interference will not occur in a particular installation.

CE Compliance

This device has been tested and found to comply with the following European Union directives: Electromagnetic Capability (89/336/EMC), Low Voltage (73/23/EEC) and R&TTED (1999/5/EC).

SJ/T 11364-2006

The following contains information that relates to China.

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉（Cd）	六价 (Cr(VI))	多溴联苯（PBB）	多溴二苯醚（PBDE）
电器部件	●	○	○	○	○	○
机构部件	○	○	○	○	○	○

○:表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T 11363-2006规定的限量要求之下。

●:表示符合欧盟的豁免条款，但该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。

x:表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。

Limited Warranty

WE'RE HERE TO HELP YOU!
NEED ASSISTANCE SETTING UP THIS PRODUCT?

Make sure you:

1. Visit www.iogear.com for more product information
2. Visit www.iogear.com/support for live help and product support

Warranty Information

This product carries a 3 Year Limited Warranty. For the terms and conditions of this warranty, please go to http://www.iogear.com/support/warranty

Register online at http://www.iogear.com/register

Important Product Information

Product Model _____

Serial Number _____

Contact

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GREEN

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